

AN APPARENTLY NEW SPECIES OF LEPTINILLUS.
(COLEOPTERA, LEPTINIDÆ.)

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The coleopterous family Leptinidæ includes but two genera and two species, but it is of especial interest because of the fact that these two species are exactly half of the number of species of Coleoptera that are known to be, or suspected of being, ectoparasites upon birds and mammals. Of the other two species one, *Platypsyllus castoris* Ritsema (the only representative of the family Platypsyllidæ) is a permanent, obligate parasite upon beavers in both its larval and adult condition. The other, a Silphid, *Lyrosoma opaca* Mann, is a resident of the nests of certain maritime birds but is suspected of utilizing the birds for purposes of transportation. Of the two Leptinids one, *Leptinus testaceus* Müll. is an oft-recorded resident of the nests of bumble bees and small mammals, but it has once been recorded as occurring on mice¹ and once from shrews². The other, *Leptinillus validus* (Horn), is apparently a much less common form and of its habits nothing is known, except that it has once been taken from the skins of Alaskan beavers¹. The discovery of a second species of *Leptinillus* with some definite information in regard to its habits is, therefore, of considerable interest.

***Leptinillus aplodontiæ*, n. sp.**

Female.—Length 3 mm., depressed and broadly oval in shape, of a reddish brown colour, feebly shiny, the entire dorsum closely and uniformly beset with fine, setiferous punctations, the setæ short and slightly lighter in colour than the body. *Head* hemihexagonal in shape behind the frontal suture, the labrum convex anteriorly, the posterior angles of the head nearly right angles, the occiput much constricted and produced into the prothorax. Beneath the lateral margin at each posterior angle is a shallow, longitudinal groove which extends forward to the base of the antennæ and into which the first antennal segment may be received. *Antennæ* 11-segmented, slender, reaching but little beyond the posterior margin of the pronotum. *Mentum* with the posterior angles produced into a stout process about as long as

1. Riley, C. V. *Insect Life*, 1 : 306. (1889).

2. Kellogg, V. L. *Science*, N. S., XXXIX : 360-61. (1914).
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the mentum itself. *Pronotum* anteriorly of the same width as the head, posteriorly about twice as wide, the greatest width about one and one-half times the length, the lateral margins arcuate.

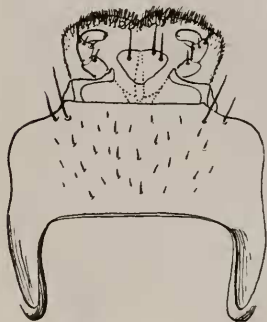


Fig. 4.—*Leptinillus apodontia* n. sp.; labium.



Fig. 5.—*Leptinillus apodontia* n. sp.; genitalia of male.

Prosternum extending over, but not separating, the anterior coxæ, without a brush of hairs at the tip. *Elytra* at the base very slightly narrower than the pronotum, then widening slightly, sharply

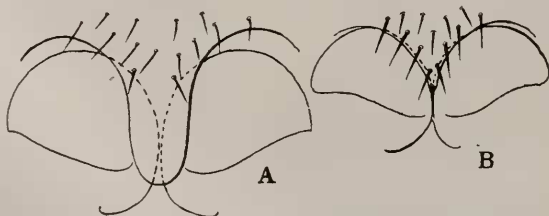


Fig. 6.—A: Prosternum of *Leptinillus apodontia* n. sp.
B: Prosternum of *Leptinus testaceus* Mull. from a specimen from Forrester Id., Alaska, det. Van. Dyke.

rounded posteriorly, entirely concealing the abdomen. *Wings* lacking. *Legs* clothed with fine pubescence. *Abdomen* ventrally with fine, setiferous punctures.

Male.—Length 3.5 mm., elytra not concealing the tip of the abdomen. Otherwise resembling the female. Genitalia very closely resembling the genitalia of *Leptinus testaceus* Müll., as figured by Sharp and Muir³.

Habitat.—From *Aplodontia* sp. (a genus of rodents peculiar to the Pacific Coast), Fallen Leaf Lake, Plumas Co., Calif., Aug., 1917. W. K. Fisher col.

Types.—Holotype, a female, and allotype, and thirteen paratypes, one dissected, mounted on slides and used as the basis of the accompanying figures, deposited in the collection of the Department of Entomology of Stanford University.

Remarks.—While this species is obviously very similar to *L. validus* (Horn) there are certain differences that are apparent upon a comparison with his original description⁴ and later notes⁵. *L. validus* is described and figured as possessing a distinct brush of stiff hairs at the tip of the prosternum, a feature that is not present in the new species, and it is also indicated that the prolongations of the posterior angles of the mentum are very long and slender, while in my specimens they are short and stout as in *Leptinus testaceus* Müll. Nor do my specimens possess any trace of the eye spot described by Horn. Certain apparent differences in shape might easily disappear upon a direct comparison of specimens but there is a real difference in size, the new species measuring but 3 mm. in length for the female and 3.5 for the male as compared with 5 mm. for *validus*. Certainly as far as the literature is concerned there is sufficient ground for recognizing the specimens from *Aplodontia* as distinct.

It should be noted that although the prosternum extends back over the anterior coxæ it does not actually separate them, and they are in fact fully as contiguous as they are in *Leptinus testaceus* Müll.

Mr. Fisher informs me that the specimens were found upon two individuals of the host, and that they leave the host, after it

3. Sharp, D. and Muir, F. Trans. Ent. Soc. London, p. 506; pl. LI, f. 55-55a. (1912).

4. Horn, G. H. Trans. Amer. Ent. Soc., 4 : 145-6; figs. (1872).

5. Horn, G. H. Trans. Amer. Ent. Soc., 10 : 113-4; pl. 5, f. 1-6. (1882).